Bond Basics and the Current Municipal Market

Ellen Evans

Deputy State Treasurer – Debt

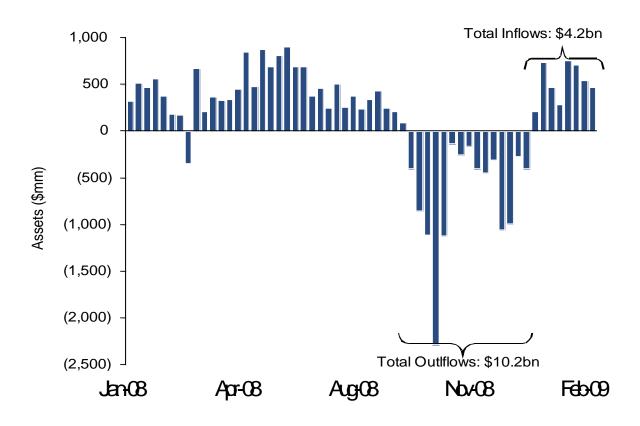
March 18, 2009

Long-Term Municipal Bond Sales: January – February

	2009		2008		
	Volume	No. of	Volume	No. of	%
	(\$000s)	Issues	(\$000s)	Issues	Chg
TOTAL	\$43,645,300	1,289	\$41,574,400	1,555	5.0
January	23,299,000	611	20,172,100	777	15.5
February	20,346,300	678	21,402,300	778	-4.9
Development	555,500	6	4,156,100	50	-86.6
Education	12,926,900	604	11,056,400	650	16.9
Electric Power	3,099,500	33	840,200	23	268.9
Environmental Facilities	139,000	6	496,300	18	-72.0
Health Care	4,231,700	48	3,870,200	82	9.3
Housing	646,500	16	1,160,700	63	-44.3
Public Facilities	2,857,900	68	1,947,800	97	46.7
Transportation	3,527,400	46	6,097,300	49	-42.1
Utilities	4,755,900	124	3,360,400	147	41.5
General Purpose	10,905,000	338	8,589,000	376	27.0
New-Money	28,117,600	791	29,056,500	1,077	-3.2
Refunding	8,376,600	419	6,019,600	352	39.2
Combined	7,151,100	79	6,498,300	126	10.0
Revenue	26,428,400	414	20,802,900	626	27.0
General Obligation	17,216,900	875	20,771,500	929	-17.1
State Governments	3,478,600	19	4,985,100	13	-30.2
State Agencies	12,628,500	128	11,041,100	163	14.4
Counties & Parishes	3,709,300	93	2,886,900	103	28.5
Cities & Towns	4,634,700	272	6,503,700	370	-28.7
Districts	10,419,500	639	7,803,800	648	33.5
Local Authorities	6,725,900	108	6,447,900	225	4.3
Colleges & Universities	2,011,000	29	1,391,300	24	44.5
Direct Issuers	37,800	1	484,100	8	-92.2
Tribal Governments	0	0	0	0	unchanged
Cooperative Utilities	0	0	30,500	1	-100

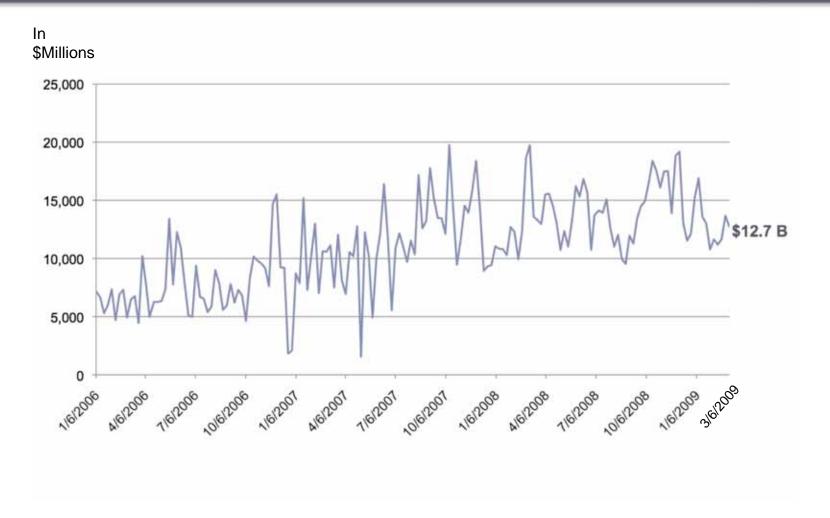
Source: Thomson Reuters

Municipal Bond Fund Cash Flows 2008-2009



Source: Goldman Sachs

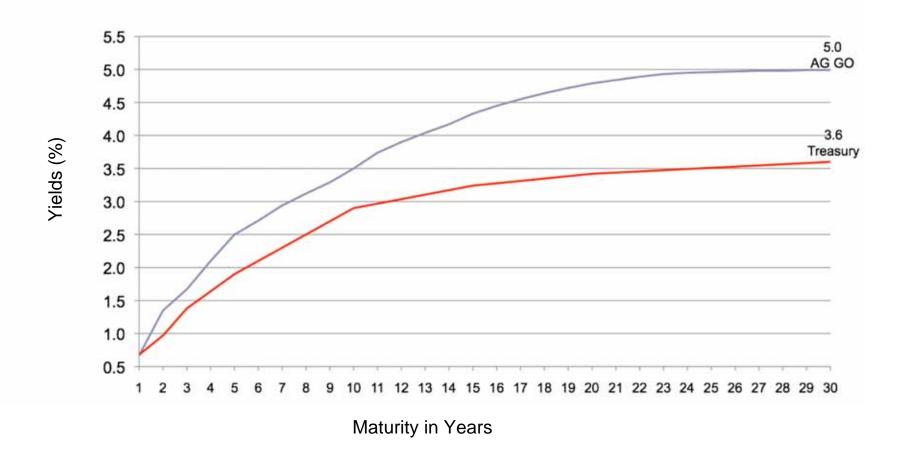
30-Day Visible Supply



Source: Thomson

Reuters

Yield Curves: Out of Alignment (3-4-09)



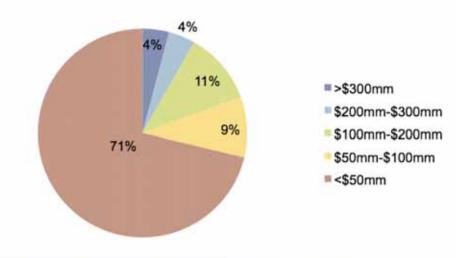
U.S. Treasury Rate: Lowest in Decades



2009 Volume: Typical Deal Size Less Than \$50 Million

Municipal Market Volume by Deal Size									
For the Week Ending:	05-Jan-09		12-Jan-09		19-Jar	19-Jan-09		26-Jan-09	
Deal Size	Par (\$mm)	# of Deals							
>\$300mm	1143.6	2	3310.1	7	1060.5	2	0	0	
\$200mm-\$300mm	1267.1	5	905	4	213.8	1	250	1	
\$100mm-\$200mm	834.6	6	1894	12	1491.2	11	150	1	
\$50mm-\$100mm	573.25	8	510.4	8	234.9	3	462.5	6	
<\$50mm	517.7	45	942.7	74	651.4	55	337.7	17	
Total	4336.3	66	7562.4	105	3651.8	72	1200.2	25	

Volume Distribution By Number of Issues



Largest New Municipal Issues

February 2009

Amount in Millions	Issuer	Date
\$950.0	Los Angeles Unified School District, Calif., GOs	4-Feb
613.9	Georgia (State), GOs	4-Feb
600.0	Georgia State Road & Tollway Authority	19-Feb
551.9	New York State Dormitory Authority	6-Feb
525.0	Massachusetts (Commonwealth), GOs	19-Feb
400.0	Connecticut (State), GOs	19-Feb
385.5	Kentucky State Property & Building Commission, govt offices	12-Feb
383.2	Massachusetts Water Resources Authority	4-Feb
362.8	New York City Municipal Water Finance Authority	19-Feb
340.6	Salem-Keizer School District No. 24-J, Ore., GOs	25-Feb
324.9	Dallas, Tex., convention centers	11-Feb
310.1	Miami-Dade County School Board, Fla.	13-Feb
284.4	Kentucky Economic Development Financing Authority, hospitals	18-Feb
251.7	Texas A&M University System	13-Feb
247.1	North Carolina Capital Facilities Finance Agency, colleges	12-Feb
244.3	Iowa Finance Authority, hospitals	24-Feb
244.0	Mecklenburg County, N.C., GOs	12-Feb
238.0	New York State Thruway Authority	19-Feb
233.1	Rutgers University, N.J., GOs	10-Feb
229.0	Oregon Department of Administrative Services (TAX/TE)	10-Feb
216.0	Kentucky Economic Development Financing Authority, hospitals	6-Feb
213.8	Jacksonville Electric Authority, Fla.	20-Feb
200.0	Florida State Board of Education, GOs	10-Feb

January 2009

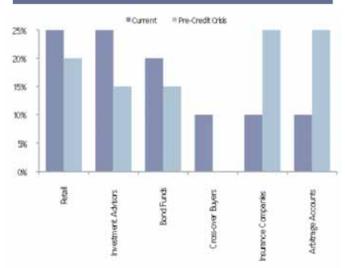
Amount in Millions	Issuer	Date
\$1,079.2	Empire State Development Corp., N.Y. (Tax/TE)	9-Jan
744.2	Salt River Project, Ariz., Electric Power	15-Jan
650.0	New York City Transitional Finance Authority	14-Jan
645.5	New York city Municipal Water Finance Authority	23-Jan
611.0	Chicago, III., GOs	14-Jan
435.8	Long Island Power Authority, N.Y.	15-Jan
415.0	Connecticut (State), Special Tax Obligation	22-Jan
400.0	Washington (State), GOs	7-Jan
393.0	Royal Oak Hospital Finance Authority, Mich	16-Jan
325.0	Minnesota (State), GOs	13-Jan
325.0	Triborough Bridge & Tunnel Authority, N.Y.	27-Jan
308.0	Pennsylvania Turnpike Commission	16-Jan
302.3	California Statewide Communities Dev. Auth. (Methodist Hospital)	9-Jan
300.0	District of Columbia Water & Sewer Authority	28-Jan
291.6	Virginia College Building Authority	9-Jan
271.3	Indiana Finance Authority, Electric Power	7-Jan
259.0	New York City Industrial Development Agency, Yankee Stadium	28-Jan
252.0	Chandler, Ariz., GOs	13-Jan
250.0	Florida Water Pollution Finance Corp.	8-Jan
236.0	Delaware (State), GOs	14-Jan
228.1	Ohio (State), School GOs	16-Jan
217.6	California Educational Facilities Authority, Colleges	8-Jan
217.6	Ohio State University	16-Jan
213.8	Tarrant Co. Cultural Ed. Fac. Fin Corp., TX (Baylor Health Care System)	22-Jan
211.6	Illinois Finance Authority (Rush University Medical Clinic)	28-Jan

Source: Thomson Reuters

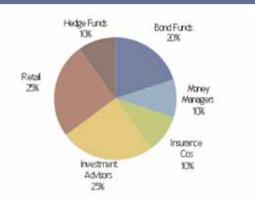
Fixed-Rate Municipal Market Investor Base Has Changed Due to the Credit Crisis

Municipal Bond Investors Strong demand, especially for the short-end of the yield curve (1-10 years), but less demand for AMT paper Retail Comfortable with municipal sector View yields as attractive Looking at relative value versus taxable equivalents Have increased in size as investors gravitating towards both safety and yield Investment Proxy for retail Advisors Investors seeking professional advice are beginning to shy away from hedge funds Greater participation since credit crisis Tax-Exempt Looking for yield Consider municipal bonds relatively safe, but prefer **Bond Funds** diversity of a fund rather than individual investments Municipal money market funds are paying close to zero Slightly greater participation since credit crisis Taxable Bond Looking for yield Cross-over View yields as attractive relative to other asset classes **Buyers** Also known as cross-over buyers Decreased in size since credit crunch due to losses Insurance Rollovers associated with losses have decreased tax benefit But still must stay within asset allocation requirements Companies Serial maturities make matching liabilities easier versus other asset classes Decreased in size since credit crisis as leverage has become **Arbitrage** less available, more expensive and regulated Accounts Invest for yield on a levered basis Interested in relative value plays

Municipal Investors – Before and After the Credit Crisis

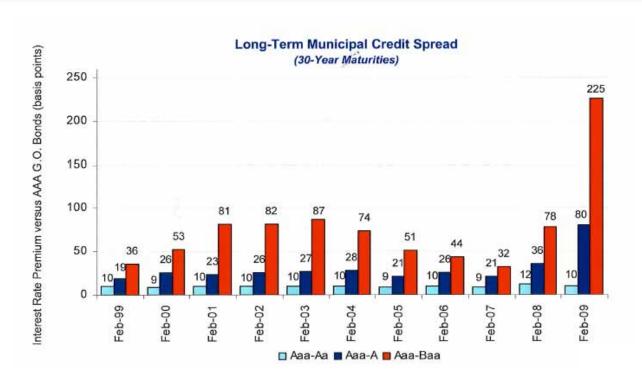


Current Long-Term Investor Distribution

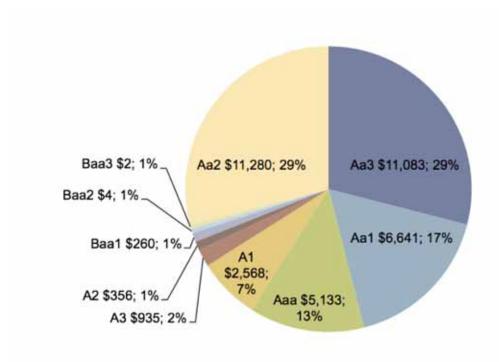


Source: J.P.Morgan (February 2009)

Investors Focused on Credit Quality: Credit Spreads Near 10-Year Highs



More than 85 % of Municipal Issuance in 2009: Issuers AA- or Above



Municipal Issuance 2009 YTD by Rating

Current Ratings

	Moody's: Aa1	Standard & Poor's: AA+/Stable	Fitch: AA/Stable
Credit Strengths	 ✓ Institutionalized conservative budgetary controls ✓ Improved financial flexibility with increased rainy day fund levels ✓ Strong demographic trends 	 ✓ Sustained historical employment and population growth, although recent trends have weakened ✓ Relatively well educated workforce, with good income indicators ✓ Good ending reserve balances and a constitutional rainy-day account, which may mitigate a projected biennial budget gap ✓ Strong financial management expectation of timely and proactive budget amendments as needed to maintain budgetary balance 	 ✓ Sound financial and debt policies and generally solid economic performance ✓ Economy is generally broad, although growth in recent years has been concentrated in the construction, aerospace and information sectors
Credit Weaknesses	 Economic weakness and steeper-thanforecast housing downturn Pressures from rising healthcare and caseload costs Exposure to cyclical commercial aerospace industry Debt ratios above average and likely to increase Voter initiative activity adds fiscal uncertainty 	 Somewhat concentrated, although gradually diversifying, economic and job bases in cyclical industries Direct tax-supported debt burden is moderate, although debt as a % of personal income remains above average 	 Concentrated revenue system Above average and rising debt levels Capital needs are substantial

Source: Moody's, S&P and Fitch

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Moody's State GO Ratings

Aaa (9 States)	Aa1 (11 States)	Aa2 (12 States)	
Delaware	Florida	Alabama	'
Georgia	Indiana*	Alaska	
Maryland	lowa*	Arkansas	
Missouri	Kansas*	Hawaii	
North Carolina	Minnesota	Idaho*	
SouthCarolina	Nevada	Kentucky*	
Utah	NewMexico	Massachusetts	
Vermont	Ohio	Oregon	
Virginia	Tennessee	Montana	
9	Texas	NewHampshire	
	Washington	North Dakota*	
	3	Pennsylvania	
Aa3 (12 States)	A1 (1 State)	A2 (1 State)	
Arizona*	California	Louisiana	

May 2008

Connecticut
Illinois
Maine
Michigan
Mississippi
NewJersey
NewYork
Oklahoma
Rhode Island
West Virginia
Wisconsin

^{*} Insurer Rating: No General Obligation Debt

2008 State Debt Medians: WA Ranked as 8th in Nation With \$1,908 (5.1%)

Net Tax-Supported Debt per Capita			Next Tax-Supported Debt as % of 2006 Personal Income				
1	Massachusetts	\$4,529	Aa2	1	Hawaii		9.9%
2	Connecticut	\$3,698	Aa3	2	Massachu	isetts	9.8%
3	Hawaii	\$3,663	Aa2	3	New Jerse	_: y	7.5%
4	New Jersey	\$3,478	Aa3	۷	Connectic	ut	7.3%
5	New York	\$2,762	Aa3	5	New York		6.3%
6	Delaware	\$2,002	Aaa	ϵ	Illinois		5.2%
7	Illinois	\$1,985	Aa3	7	Delaware		5.2%
8	Washington	\$1,908	Aa1	ε	Washingto	on	5.1%
9	Rhode Island	\$1,766	Aa3	ç	Oregon		5.0%
10	California	\$1,685	A1	10	New Mexic	00	4.8%
11	Oregon	\$1,636	Aa2	11	Mississipp	oi	4.8%
12	New Mexico	\$1,429	Aa1	12	! Kentucky		4.7%
13	Wisconsin	\$1,407	Aa3	13	Rhode Isla	and	4.7%
14	Kentucky	\$1,381	Aa2	14	Louisiana		4.3%
15	Louisiana	\$1,345	A2	15	California		4.3%
16	Maryland	\$1,297	Aaa	16	Wisconsin	1	4.1%
17	Mississippi	\$1,283	Aa3	17	West Virgi	inia	3.9%
18	Kansas	\$1,202	Aa1	18	Kansas		3.5%
19	West Virginia	\$1,101	Aa3	19	South Car	olina	3.3%
20	Florida	\$1,005	Aa1	20	Georgia		3.0%
		44.450					
	MEAN:	\$1,158			MEAN:		3.2%
	MEDIAN:	\$889			MEDIAN:		2.6%

Source: Moody's U.S. Public – 2008 State Debt Medians

2008 State Medians

	Total Net Tax Supported Debt (000's)				Gross Tax Supported Debt (000's)		
			Rating			Gros	s to Net Ratio
1	California	61,584,000	A1	1	California	68,913,000	1.12
2	New York	53,298,000	Aa3	2	New York	53,348,276	1.00
3	New Jersey	30,211,000	Aa3	3	Massachusetts	35,574,265	1.22
4	Massachusetts	39,212,000	Aa2	4	New Jersey	35,349,000	1.17
5	Illinois	25,517,925	Aa3	5	Illinois	25,760,097	1.01
6	Florida	18,339,600	Aa1	6	Michigan	22,577,509	3.00
7	Connecticut	12,960,720	Aa3	7	Florida	22,467,700	1.23
8	Washington	12,342,191	Aa1	8	Connecticut	20,578,099	1.59
9	Texas	11,497,107	Aa1	9	Washington	19,232,391	1.56
10	Ohio	11,075,372	Aa1	10	Minnesota	15,427,696	3.38
11	Pennsylvania	10,817,000	Aa2	11	Pennsylvania	14,828,000	1.37
12	Georgia	9,104,530	Aaa	12	Texas	14,810,450	1.29
13	North Carolina	8,139,665	Aaa	13	Oregon	13,567,257	2.21
14	Wisconsin	7,882,749	Aa3	14	Wisconsin	11,228,739	1.42
15	Michigan	7,531,009	Aa3	15	Ohio	11,075,372	1.00
16	Maryland	7,287,100	Aaa	16	Virginia	10,103,019	1.72
17	Oregon	6,131,939	Aa2	17	Colorado	9,173,377	5.98
18	Virginia	5,890,012	Aaa	18	Georgia	9,104,530	1.00
19	Kentucky	5,857,451	Aa2	19	Kentucky	8,172,677	1.40
20	Louisiana	5,774,788	A2	20	North Carolina	8,139,665	1.00
	TOTALS:	\$398,168,401			TOTALS:	\$534,957,269	1.34

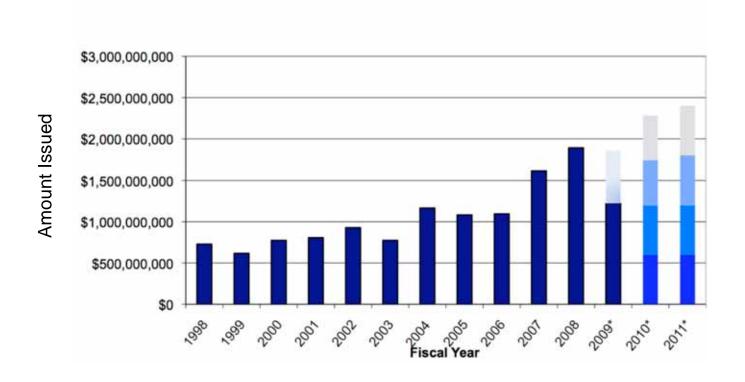
Source: Moody's U.S. Public – 2008 State Debt Medians

Moody's: WA Net and Gross Tax-Supported Debt

	6/30/2006	6/30/2007	6/30/2008
General Obligation	7,702,642	8,304,969	9,003,114
Motor Vehicle Fuel Tax Revenue	2,881,446	3,368,312	4,004,260
Total GO Debt	\$10,584,088	\$11,673,281	\$13,007,374
Capital Leases Certificates of Participation	74,387 632,133	41,388 627,522	15,224 699,136
Total Net Tax-Supported Debt	\$11,290,608	\$12,342,191	\$13,721,734
Tobacco Settlement Authority School Bond Guarantee Program	5,800,000	490,200 6,400,000	467,600 7,300,000
Total Gross Tax-Supported Debt	\$17,090,608	\$19,232,391	\$21,489,334

Amount in \$000s

WA GO Issuance: FY 1998 - 2010



* Estimated

Credit Ratings: Five Key Factors

Debt is only one!

- Underlying economic activity
- Financial position
- Governance structure
- Management policies
- Debt profile

How Does the State Sell Bonds?

Legislative Authority Required to Issue Bonds Legislative Appropriation of Bond Proceeds Secretary of Transportation Requests Bond Sale State Finance Committee Authorizes bond Sale State Treasurer sells the bonds and deposits the proceeds to WSDOT accounts

Bonding authorization requires 60 % majority vote of the Legislature.

The Legislature must also appropriate the bond proceeds to programs and expected projects

The Secretary of Transportation requests a bond sale when proceeds are needed based on a detailed cash flow analysis.

The State Finance Committee authorizes the sale of the bonds.

Bonds are sold and the proceeds are directed to the proper WSDOT account by the State Treasurer.

> Source: Office of the State Treasurer

State Treasurer Sells the Bonds



Fixed rate, floating rate, final maturity, level debt service

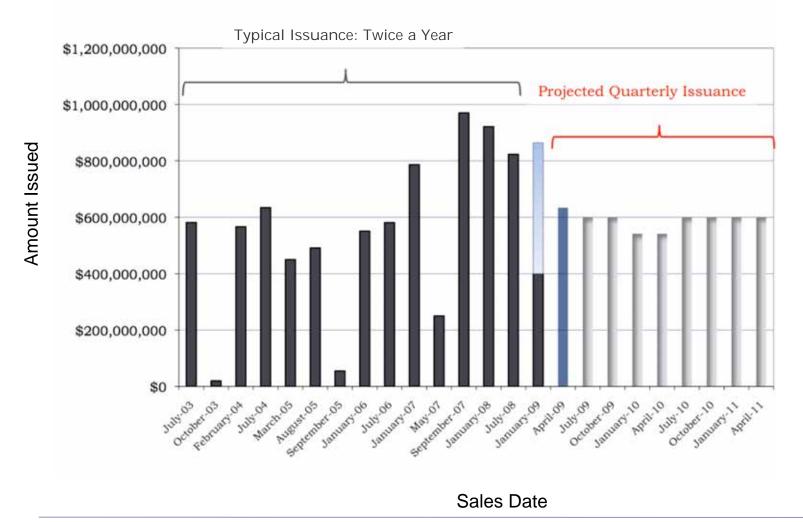
Underwriters, rating agencies and investors (official statement)

Competitive or negotiated

Sale closes two to three weeks later

In accordance with IRS regulations

WA GO Issuance: July 2003 - January 2010



Source: Office of the State

Treasurer

Financing Alternatives for Tolled Facilities

G.O./MVFT (Tolls)

Maximum maturity 30 years

Not subject to constitutional/statutory debt limits

Investor sees G.O./MVFT pledge

Potentially strains MVFT coverage, potential effect on bond ratings

Exposes MVFT Fund to risk if toll revenues fall short

G.O./MVFT/Tolls

Maximum maturity 30 years

Not subject to constitutional/statutory debt limits

Pledge tolls to investor

Toll-setting policy must be linked to pledge

Coverage ratios 1.25 – 1.5

Statutory coverage pledge may still strain MVFT coverage, potential effect on bond ratings

Revenue Bonds

Longer term bonds possible

Not subject to constitutional/statutory debt limits

Higher borrowing cost (new tolled facilities typically rated A or BBB)

Coverage ratios 1.5 – 2.0

Debt service reserve

Operating reserves